Rotary Electromagnetic Launcher (REML) System

Presented at the
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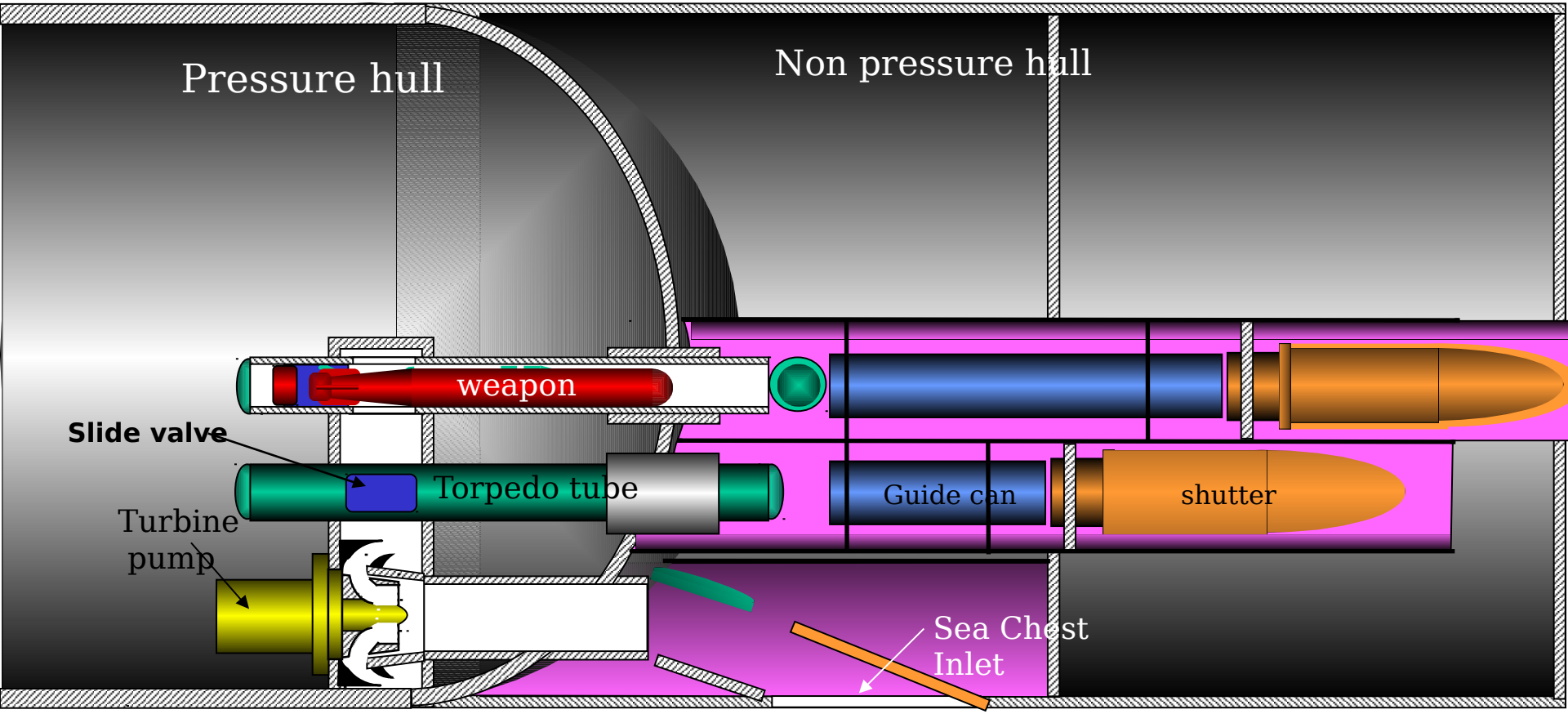
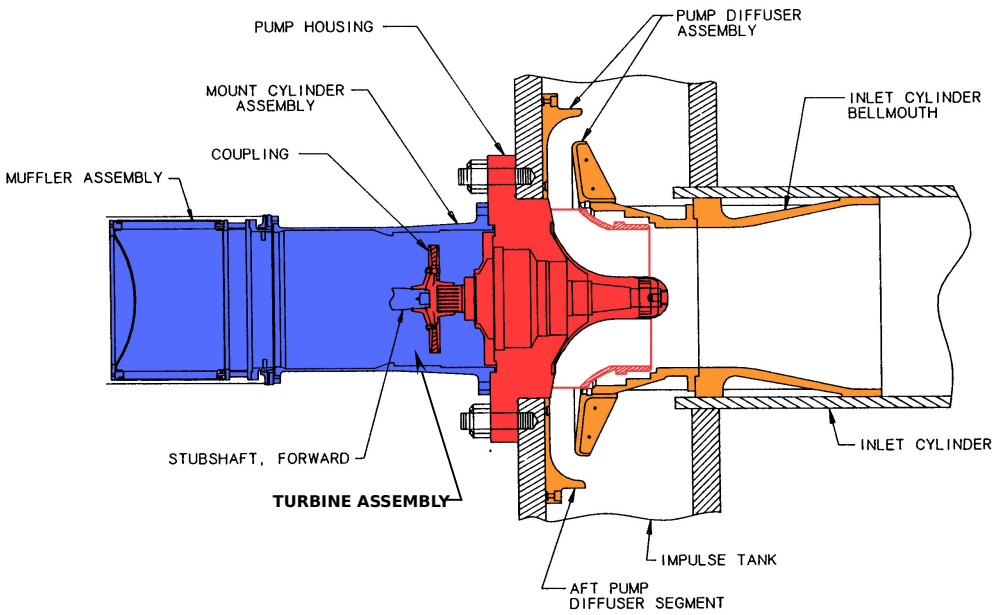
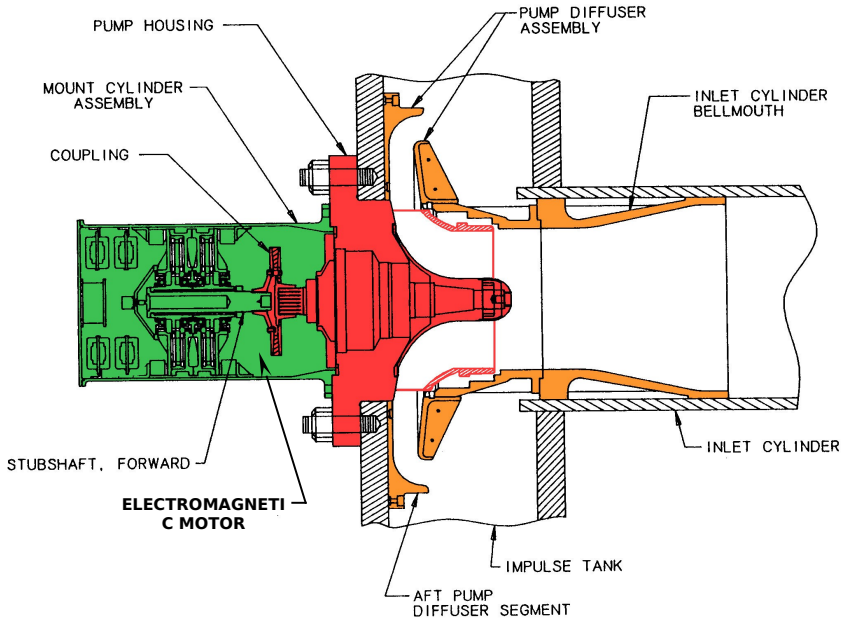
SUBMARINE TURBINE PUMP EJECTION SYSTEM



Mk 21 Air Turbine Pump / REML Comparison



Mk 21 Air Turbine Pump (ATP) Installation



REML Installation

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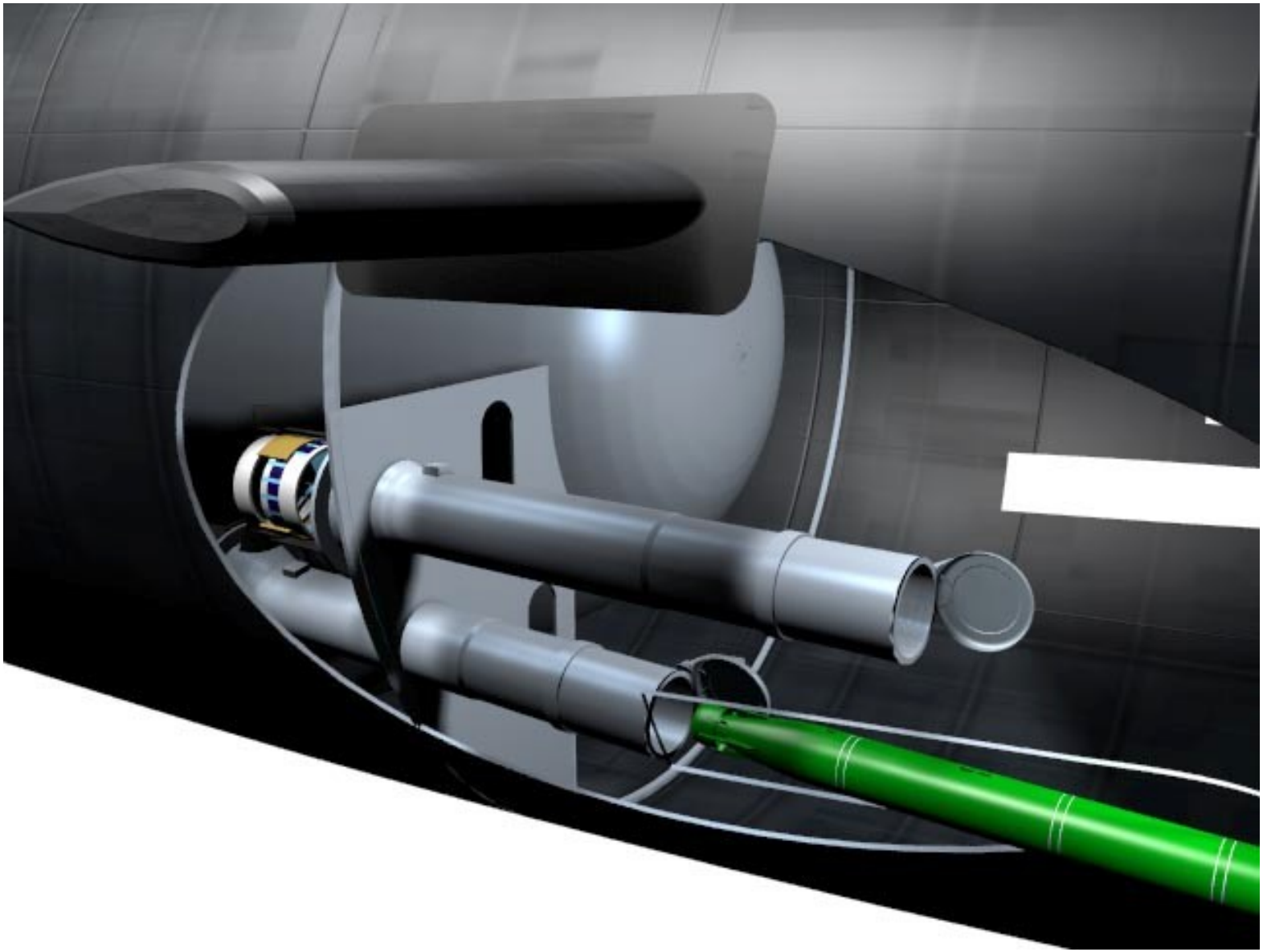
REML Launch Tube



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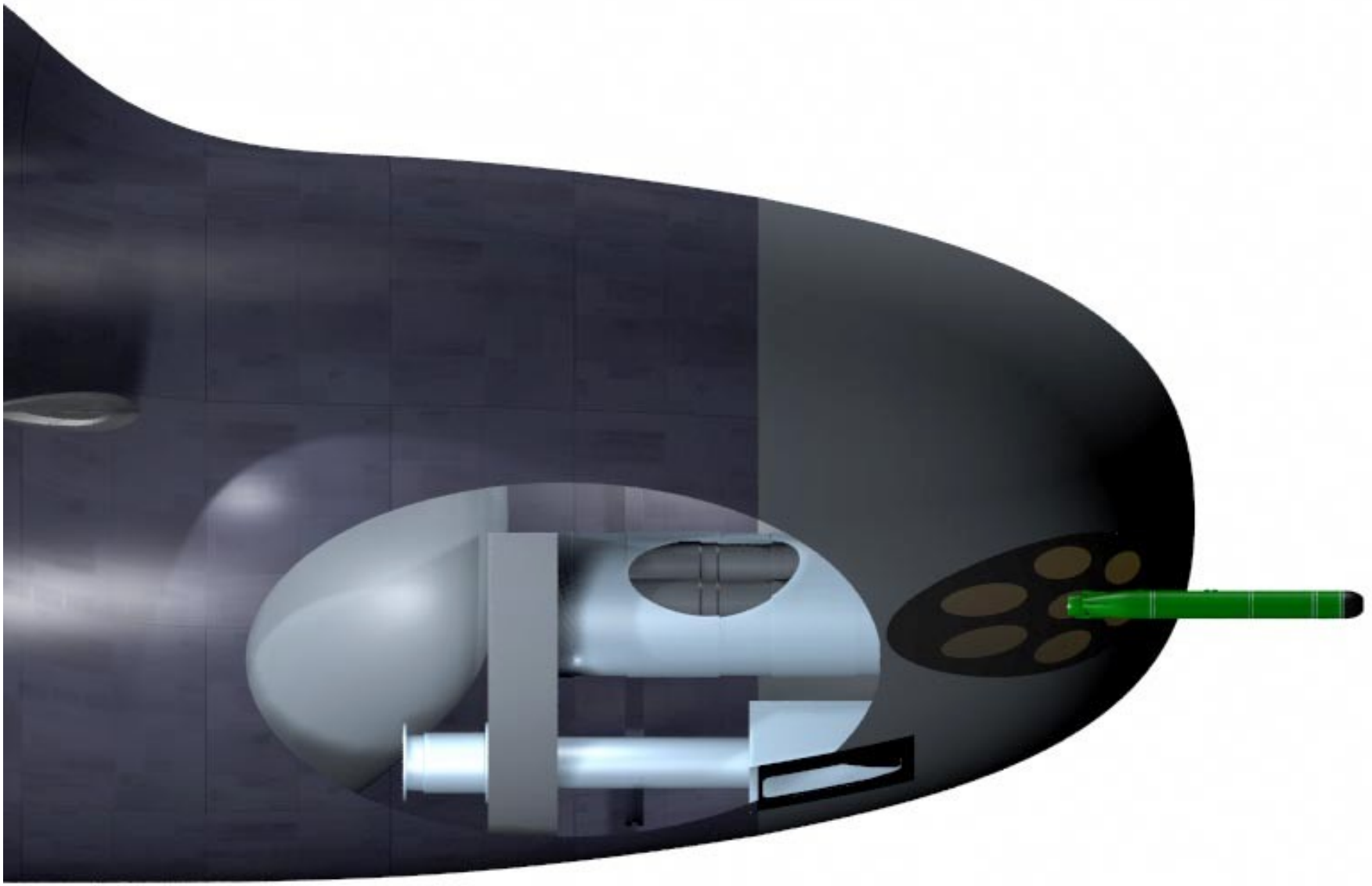
REML Modular Payload Plug



REML Benefits Assessment - Overview

- **Significant reduction in system life-cycle maintenance**
  - **Eliminates weapon launch reliance on HP Air**
  - **Reduces weapon launch reliance on hydraulics**
    - **Torpedo tube firing still requires hydraulics**
- **Greatly enhanced launch control**
  - **Provides multi-mode operation with optimized launch profile**
    - **Potential for significant acoustic benefit**
    - **Future payload acquisition cost benefit**
- **Logical step toward All-Electric ship**
- **Enabler for external payload launchers**
- **Advances in electronics support development feasibility**

REML System Schematic